

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

plicant:

Thomas C. Anthony Examiner: Thinh T. Nguyen

orial No.:

10/679,564

From-Kinko's of Cupertino

Group Art Unit: 2818

Filed:

October 6, 2003

Docket No.: 10014232-1

Title:

MAGNETIC MEMORY

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R § 1.131

Sir/Madam:

I, Thomas C, Anthony, declare as follows:

- I am the named inventor of the subject matter described and claimed in the above-identified U.S. Patent Application Serial No. 10/679,564 filed October 6, 2003.
- 2. The Office Action mailed on September 16, 2004 has been read and understood along with the references cited therein, and that I make this Declaration in support of the patentability of the claims of U.S. Patent Application Serial No. 10/679,564.
 - 3. I, Thomas C. Anthony, am an employee of Hewlett-Packard Company.
- This Declaration under 37 C.F.R. § 1.131 is made in response to the rejection 4. of claims 1-4 and 6-22 under 35 U.S.C. § 102(e) based on U.S. Patent No. 6,716,644, issued to Nejad et al., entitled "METHOD FOR FORMING MRAM BIT HAVING A BOTTOM SENSE LAYER UTILIZING ELECTROLESS PLATING", having a filing date of May 17, 2002. The Nejad et al. Patent is assigned to Micron Technology, Inc., Boise, ID. For purposes of the September 16, 2004 Office Action, the earliest date that U.S. Patent No. 6,716,644 is available for use as prior art is its filing date of May 17, 2002.
- Prior to the May 17, 2002 filing date of U.S. Patent No. 6,716,644, issued to 5. Nejad et al., and cited by the Examiner as referenced above. I conceived the above-identified and claimed invention. The claimed invention was constructively reduced to practice via the filing of U.S. Patent Application Serial No. 10/679,564. As factual evidence of my

F-242

Declaration under 37 C.F.R. § 1.131 Applicant: Thomas C. Anthony

From-Kinko's of Cupertino

Serial No.: 10/679,564 Filed: October 6, 2003

Docket No.: 10014232-1 (H303.147.101)

Title: MAGNETIC MEMORY

conception prior to May 17, 2002, attached hereto and incorporated by reference, is Exhibit A.

- б. Exhibit A is a confidential internal Invention Disclosure Record of Hewlett-Packard Company. This Invention Disclosure Record is entitled "MRAM Array With Reference Layer Self-Aligned to Conductor in Damascene Process" and has an internal Hewlett-Packard invention disclosure number of PDNO. 10014232 and was produced prior to the earliest prior art date of May 17, 2002 of U.S. Patent No. 6,716,644, issued to Nejad et al. This document describes the subject matter of the present patent application and supports that the claimed invention of the present patent application was conceived prior to May 17, 2002.
- After conceiving the claimed invention of the present application, I diligently 7. filed U.S. Patent Application Serial No. 10/679,564 as described in Paragraphs 8-17 below.
- Invention Disclosure Record 10014232 was forwarded to the law firm of 8, Dicke, Billig, & Czaja, PLLC on July 5, 2001 requesting a quote for preparation and filing of a U.S. Patent Application based upon Invention Disclosure Record 10014232. Dicke, Billig, & Czaja, PLLC received the Invention Disclosure Record 10014232 on July 9, 2001. Dicke, Billig, & Czaja, PLLC is located at Fifth Street Towers, 100 South Fifth Street, Suite 2250, Minneapolis, MN 55402 and specializes in patent, trademark, and copyright law. As factual evidence of forwarding Invention Disclosure Record 10014232 to Dicke, Billig, & Czaja, PLLC in July of 2001, attached hereto and incorporated by reference herein, is Exhibit B.
- Exhibit B is a letter from Hewlett-Packard Company to Steven B. Dicke of 9. Dicke, Billig, & Czaja requesting a quote of the cost to prepare and file a U.S. Patent Application for a number of Invention Disclosure Records listed on the front of the letter. Included in these Invention Disclosure Records is Invention Disclosure Record 10014232-1, which was forwarded to Dicke, Billig, & Czaja, PLLC along with the letter.
- 10. Thereafter, Steven E, Dicke, registration number 38,431, of Dicke, Billig, & Czaja, with the assistance of Kevin R. Swanson, registration number 37,948, of Dicke, Billig, & Czaja, began preparation of a U,S. Patent Application based upon Invention Disclosure

Dec-16-04

Declaration under 37 C.F.R. § 1,131 Applicant: Thomas C. Anthony

Serial No.: 10/679,564 Filed: October 6, 2003

Docket No.: 10014232-1 (H303.147.101)

Title: MAGNETIC MEMORY

Record 10014232. Such application is the present invention of U.S. Patent Application Serial 10/679,564. As factual evidence of commencement of preparation of U.S. Patent Application Serial No. 10/679,564, attached hereto and incorporated by reference herein, are Exhibits C and D.

- 11. Exhibit C is a facsimile transmission of Dicke, Billig, & Czaja to me, Thomas C. Anthony of Hewlett-Packard Company. Exhibit C includes a "Fax Transmittal Cover Sheet" dated October 30, 2002, which indicates that 9 pages were sent including the cover page and two Information Disclosures. The two Information Disclosures were Invention Disclosure Records 10014155-1 and 10014232-1.
- Exhibit D includes three facsimile transmissions to Kevin Anderson of 12. Anderson Illustrating located at 19917 English Court, Farmington, MN 55024. Anderson Illustrating specializes in patent illustrations and was employed to prepare necessary figures for U.S. Patent Application Serial No. 10/679,564. Exhibit D includes a 'Pax Transmittal Cover Sheet" dated June 9, 2003, indicating that 9 pages including the cover page and drawings for case H303.147.101 were transmitted to Anderson Illustrating, Case H303.147.101 is Dicke, Billig, & Czaja's reference number for U.S. Patent Application Serial No. 10/679,564 that is based upon the Invention Disclosure Record 10014232. Also, Exhibit D includes a "Fax Transmittal Cover Sheet" dated June 11, 2003, indicating that 6 pages including the cover page and drawings with changes were transmitted to Anderson Illustrating for Dicke, Billig, & Czaja's reference number H303.147.101. In addition, Exhibit D includes a "Fax Transmittal Cover Sheet", dated June 20, 2003 indicating two pages including the cover sheet and a change for Figure 8 were transmitted to Anderson Illustrating for Dicke, Billig, & Czaja's reference number H303.147.101.
- 13. A draft of the present application, based on Invention Disclosure Record 10014232, was prepared and forwarded to me, Thomas C. Anthony, via an e-mail transmission on June 11, 2003. As factual evidence of the e-mail transmission, attached hereto and incorporated by reference herein, is Exhibit E, which is a "hard copy" of a portion of the e-mail transmission to me, Thomas C. Anthony, dated June 11, 2003.

F-242

Declaration under 37 C.F.R. § 1,131 Applicant: Thomas C. Anthony

From-Kinko's of Cupertino

Serial No.: 10/679,564 Filed: October 6, 2003

Docket No.: 10014232-1 (H303,147.101)

Title: MAGNETIC MEMORY

- A Final Draft of the present invention was prepared by Steven E. Dicke and 14. forwarded via an e-mail transmission on June 23, 2003, to Philip Lyren, an attorney working for Hewlett-Packard Company. As factual evidence of the e-mail transmission, attached hereto and incorporated by reference herein, is Exhibit F, which is a "hard copy" of a portion of the e-mail transmission to Philip S. Lyren dated June 23, 2003.
- Revisions to the Final Draft application were forwarded in a seven page 15. facsimile transmission from Be Henry for Howard Boyle of Hewlett-Packard Company to Dicke, Billig, & Czaja on August 7, 2003. Instructions were given to Dicke, Billig, & Czaja to amend the document as requested and file the application. As factual evidence of the facsimile transmission, attached hereto and incorporated by reference, is Exhibit G, which is a copy of the cover letter of the facsimile transmission from Be Henry for Howard Boyle to Dicke, Billig, & Czaja.
- Revisions were made and a final draft of the patent application along with 16. signature papers including a Declaration and Power of Attorney for Patent Application and an Assignment of Patent Application were forwarded via an e-mail transmission on August 22, 2003 to me, Thomas C. Anthony. As factual evidence of the e-mail transmission, attached hereto and incorporated by reference herein, is Exhibit H, which is a "hard copy" of a portion of the e-mail transmission to me, Thomas C. Anthony, dated August 22, 2003.
- On October 6, 2003, the present application, U.S. Patent Application Serial 17. No. 10/679,564, was timely filed with the U.S. Patent and Trademark Office (U.S.P.T.O.).
- It is therefore respectfully submitted that the present application claims an 18. invention which was conceived prior to May 17, 2002 and diligently filed with the U.S.P.T.O. Thus, the Nejad et al. reference should be removed as a reference under 35 U.S.C. § 102(e).

Declaration under 37 C.F.R. § 1.131

Applicant: Thomas C. Anthony Serial No.: 10/679,564

Filed: October 6, 2003

Dec-16-04

08:30pm

Docket No.: 10014232-1 (H303.147.101)

Title: MAGNETIC MEMORY

I further declare that all statements made herein of our own knowledge are 19. true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or patent issued thereon.

Dec. 16, 2004

Write in Dark Ink on I HP Invention

EXHIBIT A

PDNO	10014232	DATE RCVD 3/2	2/01 ATT	ORNEY
R TRU		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	7	Call Non.
Descriptive Title of Invention	in: MARIN ATT	y with Refer	rance larger .	seff-Hynod
to Conducte	r in Pamas	cene Process		,
Signature of Inventor(s): P	ursuant to my (our) employmen	t agreement, I (we) submit this disc	closure on this date: [3/	22/01].
				,
				•
		······································		
Employee No. Name	A IP. S	ignature Arthou	Telnet Mailstop	Entity & Lab Name
267787 Tom 1	surrong / he	mes concessed	5	·
		••		
Employee No. Name		Signature	Telnet Mailstop	Entity & Lab Name
	· · · · · · · · · · · · · · · · · · ·			
Signature of Witness(es)Th	e invention was first explained t	o, and understood by, me (us) on t	this date: [
Full Name	- 0	ignature	Date	of Signature
ROBERTS	32(·	Eslet Sont	22-MAK	2-200/
Description of invention:	riction and analysis of the inve	-tion /		
A. Description of the consti	ruction and operation of the inve	The told warm	The Damas	cenc proces
an MRAM	all is come	intion (ethicated using ione conducted be is created of the randuction	a rue 10	lasenco
& osate lie	ette les vous	one consider	a diale th	i la me
Over. Fr	ist a breno	le is broaded	m aller	e ray.
He treund	is filled we	the conductor	metal (C	a) and
st. Page	and look The	he Cu is them, referduce de their lapped	recessed a	prescula
then eapp	CA ALL A	12 ferduse &	ause is de	posited.
amount o	year and a	the lasso	I slat 1	+ Thier
into the	aces and	wer supper		and death.
			~/ ₋	
pogo a	. I am to	A of the AL	and lay	.
are proces	sed of	o we pu	racer o	
B. Advantages of the inven	tion over what has been done b	of the pure		
The sell	elianos om	ved layer l e puined li uned at mu	Pemeratio	a mas kar
176 200	De la port	ma my		las the!
step in a	leguny to	re puried de	ayer and	Jane - C
DIMMID &	layer bathe	and at me	nimum.	petch
per Vine	In News To	And a Marietta	a with a	Isamment

Write in Dark Ink on Front Side Only, Please

77710 111 2011 1111 011 1111 0111 1111
Problems solved by the invention.
- Surphfier MAM fab process - Surphfier MAM fab process - Surphfier MAM fab process - Surphfier MAM fab process
- Survey allrain &
Prior solutions and their disadvantages (if available, attach copies of product literature, technical articles, patents, etc.).
- 5 sparate masks wed for both parned
- Suparati mush well for latter formed some some from the latter purely and several latters.
•

Pictures/Flowcharts (if any):

EXHIBIT B



Hewlett-Packard Company 11307 Chinden Boulevard Mail Stop 314 Boise, ID 83714 www.hp.com



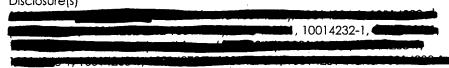
Steven R. Ormiston
PATENT ATTORNEY/OUTSOURCING
MGR

208 396 2544 Tel 208 396 3958 Fax July 5, 2001

Steven E. Dicke Dicke Billig & Czaja PA Suite 1250 701 Building 701 Fourth Ave South Minneapolis MN 55415



RE: Preparation **and filing** of Patent Applications for the attached Invention Disclosure(s)



Pursuant to Outside Counsel Procedures Dated October 15, 1999

FILE DIRECTLY TO THE USPTO by: December 12, 2001

Dear Steve: ,

We would like you to provide us with a quote of the cost for your firm to prepare and file (direct with the USPTO) a US patent application based on the HP invention disclosure(s) identified above, a copy of which is enclosed. Your quote should be based on preparing and filing this application exactly as specified on the attached green checklist.

You must use HP's USPTO forms and only reference HP's "complete" docket number on all filing documents and correspondences with the USPTO. All filing fees should be charged to HP's deposit account noted on the HP forms. Please do not prepare or file an assignment, HP will do that. Any questions regarding HP's forms and the JetForm software for use with HP's forms should be directed to Jennifer Torres at (858) 655-8008.

Your quote should be submitted on the enclosed Request for Quote And Engagement Letter Agreement. If your quote is accepted, we will return a fully executed copy of the Agreement to you for your records. The Agreement will not be binding on you or on HP until signed by HP's authorized representative. If the Agreement is not signed and returned to HP, any bills submitted by you cannot be paid.

Thank you for your assistance in this matter. If your review indicates a possible conflict for your firm, you should advise us within one week of receipt of this letter.

Sincerely,

Christistin For Steven R. O Buiston

Steven R. Ormiston

Enc.: HP Invention Disclosure(s)

RFQ(s) and Outside Counsel Checklist(s)

Patent • Trademark • Copyright • Attorneys

Suite 1250 • 701 Building • 701 Fourth Avenue South • Minneapolis, Minnesota 55415
Telephone (612) 573-2000 Facsimile (612) 573-2005

FAX TRANSMITTAL COVER SHEET

Date: October 30, 2002 No. of pages (including this page)

To: Tom Anthony

Company: Hewlett-Packard

Fax No.: (650) 857-5559

Telephone No.:

From: Kevin Swanson

Our Ref.:

303.132.101/H303.147.101

HP Ref.: 10014155-1/10014232-1

Direct Line: (612) 573-2009

Dear Tom,

Per your request, here are copies of the two Information Disclosures I promised you. Please do not hesitate to call me if you have any questions. I can be reached at the number listed above.

Thank you, Kevin Swanson

Please notify us at 612-573-2000 if all pages are not received.

Patent • Trademark • Copyright • Attorneys

FAX TRANSMITTAL COVER SHEET

Date: June 9, 2003 No. of pages: 9 (including this page)

To: Kevin Anderson

Company: Anderson Illustrating

Fax No.: 651-460-4380

Phone No.: 651-460-4393

From: Kevin Swanson

Re: Drawings

Our Ref.: H303.147.101

Direct Line: 612-573-2009

E-mail: kswanson@dbclaw.com

Kevin,

Here are drawings for a new case, H303.147.101. Please return all figures as soon as you can.

Thanks Kevin

Please notify us at 612-573-2000 if all pages are not received.

Patent • Trademark • Copyright • Attorneys

FAX TRANSMITTAL COVER SHEET

Date: June 11, 2003 No. of pages: 6 (including this page)

To: Kevin Anderson

Company: Anderson Illustrating

Fax No.: 651-460-4380

Phone No.: 651-460-4393

From: Kevin Swanson

Re: Drawings

Our Ref.: H303.147.101

Direct Line: 612-573-2009

E-mail: kswanson@dbclaw.com

Kevin,

Here are some changes to the drawings for case, H303.147.101. Please return all figures as soon as you can.

Thanks Kevin

Please notify us at 612-573-2000 if all pages are not received.

Patent • Trademark • Copyright • Attorneys

FAX TRANSMITTAL COVER SHEET

Date: June 20, 2003 No. of pages: 2 (including this page)

To: Kevin Anderson

Company: Anderson Illustrating

Fax No.: 651-460-4380

Phone No.: 651-460-4393

From: Kevin Swanson

Re: Drawings

Our Ref.: H303.147.101

Direct Line: 612-573-2009

E-mail: kswanson@dbclaw.com

Kevin,

Here is one change to Figure 8 for case, H303.147.101. Please return all figures as soon as you can.

Thanks Kevin

Please notify us at 612-573-2000 if all pages are not received.

EXHIBIT E

Kathryn Elseth - 10014232-1/H303.147.101

From:

Kathryn Elseth

To:

tom.anthony@hp.com

Date:

6/11/2003 3:15 PM

Subject:

10014232-1/H303.147.101

CC:

Kathryn Elseth; Kevin Swanson; Steve Dicke

Dear Tom,

Please find attached a first draft of the above-mentioned application and drawings.

Thank you,

Kathryn Elseth IP Legal Assistant DICKE, BILLIG & CZAJA PLLC Fifth Street Towers, Ste 2250 100 South Fifth Street Minneapolis, MN 55402 Direct Dial: (612) 573-0667 Fax number (612) 573-2005

Email: kelseth@dbclaw.com

THE INFORMATION CONTAINED IN THIS ELECTRONIC MESSAGE IS ATTORNEY-PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE AND DESTROY THIS COMMUNICATION. THANK YOU

EXHIBIT F

Kathryn Elseth - HP Ref. No. 10014232-1; DBC

From:

Jolene Neby

To:

philip-s.lyren@hp.com 6/23/2003 2:45 PM

Date:

Subject: HP Ref. No. 10014232-1; DBC No. H303.147.101 Final Draft

CC:

Dicke, Steve; Elseth, Kathryn

Phil,

Please find attached a FINAL DRAFT for the above-referenced patent application. Please review and return any comments to Steven E. Dicke at sdicke@dbclaw.com or you can reach him by phone at (612) 573-2002. Thanks.

Jolene A. Neby
IP Legal Assistant
Dicke, Billig & Czaja, PLLC
Fifth Street Towers
100 South Fifth Street
Suite 2250
Minneapolis, MN 55402
www.dbc-iplaw.com

Phone: (612) 573-0439 Fax: (612) 573-2005 ineby@dbclaw.com

This electronic mail transmission may contain confidential or privileged information. If you believe that you have received the message in error, please notify the sender by reply transmission and delete the message without copying it or disclosing it.

EXHIBIT G

Be Henry-Admin to Howard Boyle Legal Department - MS#110701 20555 SH 249, Houston, TX 77070

Tel: 281-518-5992 (Direct) Fax: 281-514-8332

Fax: 281-514-7137 (Direct)

Hewlett-Packard Co.



Dicke, Billig & Czaja PA

To:	Patrick Billig		From	Be Henry / Howard	Boyle
Faxc	612-573-2005		Pages:	7	
Phone:	612-573-2000		Date:	8/7/2003	
Re:	HP PDNO: 10014232-1	(H303.147.101)	Title	Magnetic Memory	
□ Urge	nt × For Review	☐ Please Cor	nment	☐ Please Reply	☐ Please Recycle
• Cons	ments:				
	mitted herewith	are marke	ed up	revisions to	the
Speci.	5 U				
For f	urther question	s, please	conta	ct Howard Bo	yle at
281-5	18-96 4 5 or emai	l at howar	d.boy	le@hp.com.	
Thank	you.			professional states	to the second
Ве Н	entv				

Confidentiality Note: The documents accompanying this facsimile transmission contain information from Hewlett-Packard Company which is confidential or privileged. The information is intended to be for the use of the individual or entity named on this transmission sheet. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this faxed information is prohibited. If you have received this facsimile in error, please notify us by telephone immediately so that we can arrange for the retrieval of the original documents at no cost to you.

If you do not receive all the pages, or if there is any difficulty in receiving, please call: 281-518-5992 and ask for the operator named above.

Kathryn Elseth - 10014232-1/H303.147.101

From:

Kathryn Elseth

To: Date: tom.anthony@hp.com 8/22/2003 2:30 PM

Subject: 10014232-1/H303.147.101

CC:

Kathryn Elseth; Kevin Swanson; Steve Dicke

Dear Tom,

Please find attached a FINAL DRAFT of the above-identified patent application. In addition, please find attached a DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION document and an ASSIGNMENT OF PATENT APPLICATION document. Both documents need to be executed by you for filing with the U.S. Patent and Trademark Office. The Assignment document assigns all rights in the patent application from the inventors to Hewlett-Packard Development Company LP.

It is important that you sign and date the Declaration and Power of Attorney document on or before the date that you sign and date the Assignment document.

Due to the timeliness of this matter, please <u>return</u> the signed and dated Declaration and Power of Attorney document and the signed and dated Assignment document to my attention via Federal Express as soon as possible.

If you have any questions, please feel free to contact me at the number listed below.

Thank you, Kathryn Elseth IP Legal Assistant DICKE, BILLIG & CZAJA PLLC Fifth Street Towers, Ste 2250 100 South Fifth Street Minneapolis, MN 55402 Direct Dial: (612) 573-0667 Fax number (612) 573-2005

Email: kelseth@dbclaw.com

THE INFORMATION CONTAINED IN THIS ELECTRONIC MESSAGE IS ATTORNEY-PRIVILEGED AND CONFIDENTIAL INFORMATION INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE AND DESTROY THIS COMMUNICATION. THANK YOU